

Tokunori KIMURA
Serial No. 10/596,052
June 11, 2010

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

With respect to the filing of applicant's certified priority document, the Examiner is requested to review and correct appropriate USPTO records so as to properly indicate that it has already been duly filed and received at the USPTO. For example, the notice of acceptance issued by the USPTO on September 29, 2008, explicitly acknowledges that the applicant's priority document was filed on May 26, 2006. In addition, applicant attaches to this response a copy of Form PCT/IB/304 mailed from the International Bureau on January 12, 2006, acknowledging receipt of applicant's priority document on December 22, 2005.

If there is any continued belief that applicant has not already duly filed the certified priority document, then it is respectfully requested that the undersigned be telephoned as soon as possible for prompt resolution.

The Examiner's indication that the IDS of June 3, 2008, fails to comply with regulations because there was no attachment of the therein identified Chinese office action papers is respectfully traversed.

As shown by the attached copy of the USPTO postcard receipt stamped June 3, 2008, confirming receipt of not only the IDS and Form PTO/S/08a, but also of the attached reference therein identified. Apparently, there was error on the part of the

Tokunori KIMURA
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USPTO staff in failing to properly direct a scanned copy of this attachment into the appropriate electronic file. In any event, another copy is attached for the Examiner's convenience. Reconsideration and return of a fully initialled copy of Form PTO/SB/08a is respectfully requested. Under the circumstances, it is not believed that any further certification or fee should be required. However, if such fee is required, then it is hereby authorized for such fee to be charged to our Deposit Account No. 14-1140.

In response to the formality-based objections to claims 7, 11 and 17, these claims have been amended as suggested by the Examiner, thus obviating these grounds for objection.

In response to the rejection of claim 6 under 35 U.S.C. §112, second paragraph, reference to "the exterior" has simply been deleted from this claim, thus mooting this ground of rejection as well.

Accordingly, all outstanding formality-based issues are now believed to have been resolved in the applicant's favor. If the Examiner disagrees, then it is respectfully requested that the undersigned be telephoned for prompt resolution.

The above amendment cancels, without prejudice or disclaimer, the withdrawn patentably distinct claims that were earlier subject to restriction requirement.

The Examiner is thanked for finding allowable subject matter at original dependent claims 8, 10, 15, 19, 21-23, 25 and 26. It will be noted that, by the above

Tokunori KIMURA
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amendment, all remaining independent claims have now been amended so as to incorporate the substance of allowable subject matter found at original dependent claim 15. Accordingly, all pending claims are now believed to be in fully allowed condition.

The rejection of claims 1-5, 7, 9, 11-14, 16-18, 20-24, 27-29, 37-38, 41 and 42 under 35 U.S.C. §102 as allegedly anticipated by Takizawa JP '507 is respectfully traversed.

Since this ground of rejection has been mooted by the above amendment, it is not necessary at this time to provide detailed reasons for such traversal. However, applicant reserves the right to do so at some future time in some future proceeding should it become necessary or advisable.

It is also noted that applicant's January 28, 2010, request for clarification of the outstanding office action has not yet been acted upon. Accordingly, it is perhaps unclear as to exactly what reference is intended at pages 8-9 of the office action when discussing claims 37, 38, 41 and 42 where reference is made to a "Takahashi" reference. Presumably, the Examiner intended to refer to "Takizawa".

The rejection of claim 6 under 35 U.S.C. §103 based on Takizawa in view of Kretschmer '916 is also respectfully traversed.

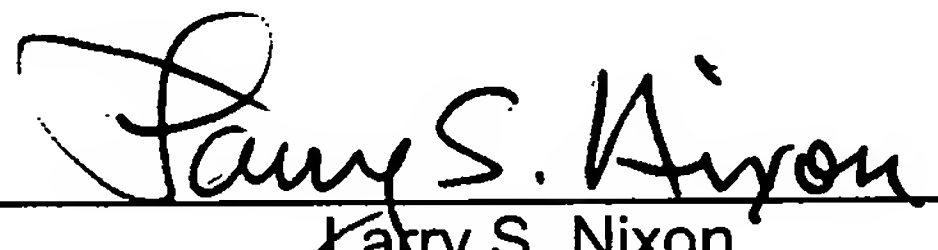
However, once again, since the above amendments have mooted this ground of rejection, it is not necessary at this time to provide detailed reasons for such traversal.

Tokunori KIMURA
Serial No. 10/596,052
June 11, 2010

Accordingly, there being no other outstanding issues, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

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TO: PCT-1567

PCTNOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT

From the INTERNATIONAL BUREAU

To:

HATANO, Hisashi
TOKYO INTERNATIONAL PATENT FIRM, 2nd
Floor, Miyata Building, 17-16, Nishi-Shimbashi
1-Chome,
Minato-Ku,
Tokyo 1050003
JAPON

(PCT Administrative Instructions, Section 411)

Date of mailing (day/month/year) 12 January 2006 (12.01.2006)	IMPORTANT NOTIFICATION	
Applicant's or agent's file reference 98G200157PCT		
International application No. PCT/JP2005/020736		International filing date (day/month/year) 11 November 2005 (11.11.2005)
International publication date (day/month/year) Not yet published		Priority date (day/month/year) 12 November 2004 (12.11.2004)
Applicant KIMURA, Tokunori		

1. By means of this Form, which replaces any previously issued notification concerning submission or transmittal of priority documents, the applicant is hereby notified of the date of receipt by the International Bureau of the priority document(s) relating to all earlier application(s) whose priority is claimed. Unless otherwise indicated by the letters "NR", in the right-hand column or by an asterisk appearing next to a date of receipt, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
2. (If applicable) The letters "NR" appearing in the right-hand column denote a priority document which, on the date of mailing of this Form, had not yet been received by the International Bureau under Rule 17.1(a) or (b). Where, under Rule 17.1(a), the priority document must be submitted by the applicant to the receiving Office or the International Bureau, but the applicant fails to submit the priority document within the applicable time limit under that Rule, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
3. (If applicable) An asterisk (*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b) (the priority document was received after the time limit prescribed in Rule 17.1(a) or the request to prepare and transmit the priority document was submitted to the receiving Office after the applicable time limit under Rule 17.1(b)). Even though the priority document was not furnished in compliance with Rule 17.1(a) or (b), the International Bureau will nevertheless transmit a copy of the document to the designated Offices, for their consideration. In case such a copy is not accepted by the designated Office as the priority document, Rule 17.1(c) provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
12 November 2004 (12.11.2004)	2004-329783	JP	22 December 2005 (22.12.2005)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

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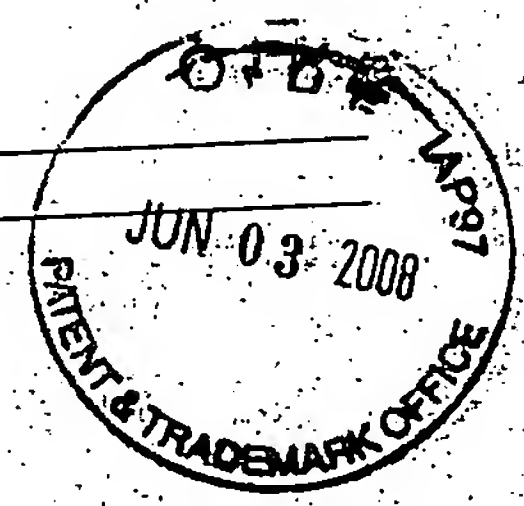
Form PCT/IB/304 (January 2004)

CPQSIJANI

Serial No.: 10/596,052
Applicant: Kimura
Title: Magneto Resonance Imaging Device
Image Data Correcting Device and
Image Data Correcting method

Atty.: 2
Date: 6/3/08
Client: 2382
Ref: 54

Amendment
Pages Specification
Claims
Sheets Drawings: Formal
Informal
Declaration (Pages)
Assignment
Priority Document
Base Issue Fee Transmittal
Fee: ☐ Check ☐ Credit Card



Other: IDS, Form PTO/SB/08a + reference



中华人民共和国国家知识产权局

100037

北京市阜成门外大街2号万通新世界广场8层
中国国际贸易促进委员会专利商标事务所
王以平

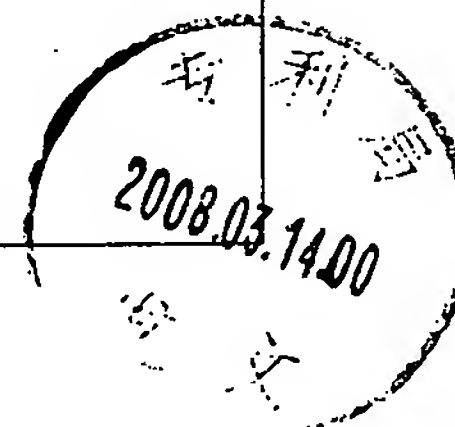
发文日

申请号: 2005800017463



申请人: 株式会社东芝, 东芝医疗系统株式会社

发明名称: 磁共振成像装置、图像数据修正装置和图像数据修正方法



第一次审查意见通知书

(进入国家阶段的 PCT 申请)

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。

☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局专利局决定自行对上述发明专利申请进行审查。

2. ☒ 申请人要求以在:

JP 专利局的申请日 2004 年 11 月 12 日为优先权日,

专利局的申请日 年 月 日为优先权日,

专利局的申请日 年 月 日为优先权日。

3. ☐ 申请人于 年 月 日和 年 月 日以及 年 月 日提交了修改文件。

经审查, 申请人于 年 月 日提交的 不符合专利法实施细则第 51 条第 1 款的规定。

☐

4. ☒ 审查是针对原始提交的国际申请的中文译文进行的。

☐ 审查是针对下述申请文件进行的:

☐ 说明书 第 页, 按照进入中国国家阶段时提交的国际申请文件的中文文本;

第 页, 按照专利性国际初步报告附件的中文文本;

第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;

第 页, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;

第 页, 按照 年 月 日所提交的修改文件。

☐

☐ 权利要求 第 项, 按照进入中国国家阶段时提交的国际申请文件的中文文本;

第 项, 按照依据专利合作条约第 19 条规定所提交的修改文件的中文文本;

第 项, 按照专利性国际初步报告附件的中文文本;

第 项, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;

第 项, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;

第 项, 按照 年 月 日所提交的修改文件。

☐

☐ 附图 第 页, 按照进入中国国家阶段时提交的国际申请文件的中文文本;

第 页, 按照专利性国际初步报告附件的中文文本;

第 页, 按照依据专利合作条约第 28 条或 41 条规定所提交的修改文件;

第 页, 按照依据专利法实施细则第 51 条第 1 款规定所提交的修改文件;

第 页, 按照 年 月 日所提交的修改文件。



☐

☒ 本通知书引用下述对比文件(其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期 (或抵触申请的申请日)
1.	J1 特开 2000-157507A	2000-06-13

5. 审查的结论性意见:

☐ 关于说明书:

- ☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐ 说明书不符合专利法第 26 条第 3 款的规定。
- ☐ 说明书不符合专利法第 33 条的规定。
- ☐ 说明书的撰写不符合专利法实施细则第 18 条的规定。

☒ 关于权利要求书:

- ☒ 权利要求 36, 40, 44 不具备专利法第 22 条第 2 款规定的新颖性。
- ☐ 权利要求 不具备专利法第 22 条第 3 款规定的创造性。
- ☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☒ 权利要求 1、28、30、37-39、41-43 不符合专利法第 26 条第 4 款的规定。
- ☐ 权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐ 权利要求 不符合专利法第 33 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 2 条第 1 款的规定。
- ☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☒ 权利要求 1、7、12、19、21-23、27、28、30、37-39、41-43 不符合专利法实施细则第 20 条的规定。
- ☒ 权利要求 30、39、43 不符合专利法实施细则第 21 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 22 条的规定。
- ☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐ 分案的申请不符合专利法实施细则第 43 条第 1 款的规定。

上述结论性意见的具体分析见本通知书的正文部分。

6. 基于上述结论性意见, 审查员认为:

- ☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

7. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的四个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和 / 或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和 / 或代理人不得前来国家知识产权局专利局与审查员举行会晤。

8. 本通知书正文部分共有 4 页, 并附有下列附件:

☒ 引用的对比文件的复印件共 1 份 7 页。

☐

审查员: 李林霞 (9924)



2008 年 2 月 29 日

审查部门

审查协作中心



第一次审查意见通知书正文

申请号：2005800017463

本申请涉及利用磁共振现象得到被检体的磁共振图像的磁共振成像装置、图像数据修正装置和图像数据修正方法。经审查，现提出如下审查意见。

1、权利要求36、40、44请求保护的技术方案不具备专利法第二十二条第二款规定的新颖性。

权利要求36请求保护一种图像数据修正装置，对比文件1(JP特开2000-157507A)公开了一种核磁共振的成像装置，其中具有对图像数据进行修正的装置，并具体公开了(参见说明书第21-29段、附图6)该装置具备：将获得的被检测体的图像数据从实空间(相当于本权利要求的第一空间)变换为k空间(相当于本权利要求的第二空间)的数据的部件(相当于本权利要求的第一数据变换部件)；在k空间上对数据进行导航修正704的部件(相当于本权利要求的修正部件)；将k空间上修正后的数据进行二维傅立叶变换707，获得实空间上修正后的图像信号706的装置(相当于本权利要求的第二数据变换部件)。由此可见，对比文件1公开了该权利要求的全部技术特征，并且对比文件1公开的技术方案与该权利要求请求保护的技术方案属于同一技术领域，解决相同的技术问题，并具有相同的预期效果，因此该权利要求请求保护的技术方案不具备新颖性。

权利要求40请求保护一种图像数据修正方法，对比文件1公开了一种核磁共振的成像装置及其对图像数据进行修正的方法，并具体公开了(参见说明书第21-29段、附图6)将获得的被检测体的图像数据从实空间(相当于本权利要求的第一空间)变换为k空间(相当于本权利要求的第二空间)的数据；在k空间上对数据进行导航修正704；将k空间上修正后的数据进行二维傅立叶变换707，获得实空间上修正后的图像信号706。由此可见，对比文件1公开了该权利要求的全部技术特征，并且对比文件1公开的技术方案与该权利要求请求保护的技术方案属于同一技术领域，解决相同的技术问题，并具有相同的预期效果，因此该权利要求请求保护的技术方案不具备新颖性。

权利要求44请求保护一种图像数据修正装置，对比文件1公开了一种核磁共振的成像装置，其中具有对图像数据进行修正的装置，并具体公开了(参见说明书第11-14, 21-29段、附图6)该装置具备：磁共振成像装置具备接收线圈405、信号检测装置406和图像重构部分407(三者相当于本权利要求的数据收集部件)扫描和收集被检测体的实空间(相当于本权利要求的第一空间)上的图像数据；将获得的被检测体的图像数据的多个区域从实空间(相当于本权利要求的第一空间)变换为k空间(相当于本权利要求的第二空间)的数据的部件(相当于本权利要求的第一数据变换部件)；在k空间上对数据进行导航修正704的部件(相当于本权利要求的修正部件)；将k空间上修正

后的数据进行二维傅立叶变换707，获得实空间上修正后的图像信号706的装置(相当于本权利要求的第二数据变换部件)。由此可见，对比文件1公开了该权利要求的全部技术特征，并且对比文件1公开的技术方案与该权利要求请求保护的技术方案属于同一技术领域，解决相同的技术问题，并具有相同的预期效果，因此该权利要求请求保护的技术方案不具备新颖性。

2、权利要求1、28、30、37-39、41-43不符合专利法第二十六条第四款的规定。

权利要求1、28、37、38、41和42中都含有与特征“在通过磁共振成像的扫描而收集到的上述被检体的摄像部位的图像数据的第一区域中进行与第二区域不同的修正”相关的特征，该特征仅说明第一区域与第二区域的修正方式不同，并没有限定使用何种修正方法来进行修正，所以其请求保护使用各种修正方法的技术方案。但是本申请说明书中仅公开了使用如权利要求12、23、27的附加技术特征所述的一种修正方法，而且并不是所有的修正方法都能够解决本发明所要解决的技术问题，并达到相同的技术效果，例如对高频和低频成分进行滤波的修正方法。由此可见，所属领域的技术人员不能够从说明书公开的内容得到或概括得出该权利要求请求保护的技术方案，因此该权利要求未以说明书为依据，不符合专利法第二十六条第四款的规定。申请人可以将权利要求12、23或27的附加技术特征加入上述权利要求。

权利要求1、28、37、38、41和42中都含有与特征“在通过磁共振成像的扫描而收集到的上述被检体的摄像部位的图像数据的第一区域中进行与第二区域不同的修正”相关的特征，该特征仅说明要对图像数据进行修正，没有说明在什么数据空间上进行修正，即该权利要求请求保护在任何空间上的修正。然而说明书中仅给出了在 r 空间中测量或预测非线性运动信息，在 k 空间上进行分割，并对多个分割 k 空间进行相互不同的0次相位修正，加权地将该修正后的数据相互相加(参见说明书第74页第3段)。即说明书给出的修正是在特定空间上进行的，并不是在任意空间上进行的，而且由于磁共振成像的特殊性，不同空间上的修正使修正结果的差异都很大，因此不可能都能够解决本发明要解决的技术问题，并达到相同的技术效果。由此可见，所属领域的技术人员不能够从说明书公开的内容得到或概括得出该权利要求请求保护的技术方案，因此该权利要求未以说明书为依据，不符合专利法第二十六条第四款的规定。

权利要求30、39和43都含有与特征“对上述第三区域中的上述第二空间上的数据，实施与上述第四区域不同的修正”相关的特征，该特征仅说明第三区域与第四区域的修正方式不同，并没有限定使用何种修正方法来进行修正，所以其请求保护使用各种修正方法的技术方案。但是本申请说明书中仅公开了使用如权利要求12、23、27的附加技术特征所述的一种修正方法，而且并不是所有的修正方法都能够解决本发明所要解决的技术问题，比如对高频和低频成分进行滤波的修正方法，并达到相同的技术效

果。由此可见，所属领域的技术人员不能够从说明书公开的内容得到或概括得出该权利要求请求保护的技术方案，因此该权利要求未以说明书为依据，不符合专利法第二十六条第四款的规定。申请人可以将权利要求12、23或27的附加技术特征加入上述权利要求。

3、权利要求1、7、12、19、21-23、27、28、30、37-39、41-43不符合专利法实施细则第二十条第一款的规定。

权利要求1、28、37、38、41和42中都含有特征“第一区域”和“第二区域”，但是没有说明该“第一区域”和“第二区域”是何种区域以及这两种区域与运动信息的关系，使这两个区域的含义不能确定，导致该权利要求的保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求12、23和27中分别含有“来实质上生成多个图像数据”、“来实质上生成成为合成对象的上述3个或以上的图像数据”和“实质上生成多个图像数据”，其中的“实质上”不能清楚地表述如何生成图像数据，导致该权利要求的保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求7中含有“3个或以上”，该特征不能清楚地表明是几个以上，导致该权利要求地保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求19含有“至少3个或以上”和“至少2个或以上”该特征不能清楚地表明是几个以上，导致该权利要求地保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求21中含有“实质上线性地增加的分布”，其中的“实质上”不能清楚地表述怎样线性地增加，导致该权利要求的保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求22含有“至少2个或以上”该特征不能清楚地表明是几个以上，导致该权利要求地保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求23中含有“3个或以上”，该特征不能清楚地表明是几个以上，导致该权利要求地保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。

权利要求30、39和43中都含有特征“第一区域”、“第二区域”、“第三区域”、“第四区域”、“第一空间”和“第二空间”。但是没有限定是何种区域和空间，使这些特征的含义不能确定，导致该权利要求的保护范围不清楚，不符合专利法实施细则第二十条第一款的规定。申请人可以将权利要求31附加技术特征中对“第一空间”和“第二空间”的限定加入上述权利要求，以克服“第一空间”和“第二空间”不清楚的缺陷。

4、权利要求30、39和43不符合专利法实施细则第二十一条第二款的规定。

权利要求30、39和43请求保护图像数据修正装置或方法，该装置和方法要解决的技术问题是对磁共振图像进行修正以消除非线性运动造成的图像恶化，因此与对象的运动信息有关的装置或步骤是解决该技术的必要技术特征，但是权利要求30、39和43不含有相关特征。由此可见，权利要求30、39和43缺少解决其技术问题的必要技术特征，不符合专利法实施细则第二十一条第二款的规定。

申请人应当在本通知书指定的答复期限内对本通知书提出的问题逐一进行答复，提交修改后的权利要求书，并对说明书作适应性修改。申请人对申请文件的修改应当符合专利法第三十三条的规定，不得超出原说明书和权利要求书记载的范围。对申请文件进行的任何改动，务请详细说明修改没有超范围的理由。申请人提交的修改文件应当包括：修改涉及部分的替换页（一式两份），用于替换相应的原文；修改对照页，标注出修改的内容。

审查员：李林霞

代码：9924

Articles and Rules Cited by the Examiner in this Office Action

Article 22. Any invention or utility model for which patent right may be granted must possess novelty, inventiveness and practical applicability.

Novelty means that, before the date of filing, no identical invention or utility model has been publicly disclosed in publications in the country or abroad or has been publicly used or made known to the public by any other means in the country, nor has any other person filed previously with the Patent Administration Department Under the State Council an application which described the identical invention or utility model and was published after the said date of filing.

Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress.

Practical applicability means that the invention or utility model can be made or used and can produce effective results.

Article 26. Where an application for a patent for invention or utility model is filed, a request, a description and its abstract, and claims shall be submitted.

The request shall state the title of the invention or utility model, the name of the inventor or creator, the name and the address of the applicant and other related matters.

The description shall set forth the invention or utility model in a manner sufficiently clear and complete so as to enable a person skilled in the relevant field of technology to carry it out; where necessary, drawings are required. The abstract shall state briefly the main technical points of the invention or utility model.

The claims shall be supported by the description and shall state the

extent of the patent protection asked for.

Article 33. An applicant may amend his or its application for a patent, but the amendment to the application for a patent for invention or utility model may not go beyond the scope of the disclosure contained in the initial description and claims, and the amendment to the application for a patent for design may not go beyond the scope of the disclosure as shown in the initial drawings or photographs.

Rule 20. The claims shall define clearly and concisely the matter for which protection is sought in terms of the technical features of the invention or utility model.

If there are several claims, they shall be numbered consecutively in Arabic numerals.

The technical terminology used in the claims shall be consistent with that used in the description. The claims may contain chemical or mathematical formulae but no drawings. They shall not, except where absolutely necessary, contain such references to the description or drawings as: “as described in part... of the description”, or “as illustrated in Figure... of the drawings”.

The technical features mentioned in the claims may, in order to facilitate quicker understanding of the claim, make reference to the corresponding reference signs in the drawings of the description. Such reference signs shall follow the corresponding technical features and be placed in parentheses. They shall not be construed as limiting the claims.

Rule 21. The claims shall have an independent claim, and may also contain dependent claims.

The independent claim shall outline the technical solution of an invention or utility model and state the essential technical features necessary for the solution of its technical problem.

The dependent claim shall, by additional technical features, further define the claim which it refers to.